

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
1	Professional Services Rates: Principal	The authorized activities for a Principal include: direct professional staff; serve as technical expert or coordinator of large or technically challenging projects; provide final review of project documents that legally bind the company; limited site visits on complex projects. Assume no per diem allowance.
2	Professional Services Rates: Senior Level	The authorized activities for a Senior Level Professional include: project management/oversight; limited work plan preparation on complex sites; final report preparation/review; develop and oversee project budget; work plan review; coordinate with agency, client and contractors; occasional site inspections; hydrogeologic and contaminate modeling; equipment specification review; supervise complex remediation activities. Assume no per diem allowance.
3	Professional Services Rates: Project Level	The authorized activities for a Project Level Professional include: work plan preparation; field work preparation and planning; occasional site visits during site characterization activities; conduct field activities during complex remediation activities; report preparation and review; data review and analysis; equipment selection and design; supervise UST soil and groundwater remediation activities; oversight of waste characterization, transportation, and disposal. Assume no per diem allowance.
4	Professional Services Rates: Staff Level	The authorized activities for a Staff Level Professional include: report preparation; remediation system installation, operation, and maintenance; site reconnaissance and mapping; obtain site access; installation of soil borings and monitoring wells; supervise UST removal, GW sample collection other than boring, soil removal, and other on-site remediation activities; assist with waste characterization, transportation, and disposal; assist in modeling and data analysis. Assume no per diem allowance.
5	Professional Services Rates: Field Level	The authorized activities for a Field Level Professional include: field activities associated with periodic groundwater monitoring and monthly static water level/free product gauging; well purging and development; free product removal; sample collection, limited contractor supervision; field equipment/sample preparation; decontamination; other routine field activities. Assume no per diem allowance.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
6	Professional Services Rates: Technical Personnel (CADD, Computer, Map Production, etc.)	The authorized activities for Technical Personnel include: CADD work; generate new drawings, maps and plans; revisions to existing drawings, maps, and plans. Assume no per diem allowance.
7	Professional Services Rates: Administrative Assistant	The authorized activities for Administrative Assistant Professionals include: bookkeeping; invoice preparation; proofreading/editing; and some word processing. Assume no per diem allowance.
8	Professional Services Rates: Clerical/ Word Processor (Computer Included)	The authorized activities for Clerical/Word Processing Professionals include: general clerical duties; word processing; documentation reproduction; report binding; filing; etc. Assume no per diem allowance.
9	Construction/Contracting Services Rates: Construction Field Supervisor	The authorized activities for a Construction Field Supervisor include: supervision of all logistical matters including pre- and post-field planning and scheduling activities; supervises complex construction projects requiring multiple construction personnel. Assume no per diem allowance.
10	Construction/Contracting Services Rates: Skilled Labor	The authorized activities for Skilled Laborers include: small equipment operation, as well as activities typically performed by individuals in the general construction, welding, electrical, and plumbing trades. A skilled laborer may hold a specific license or certification for a particular skill or craft. Assume no per diem allowance.
11	Construction/Contracting Services Rates: Unskilled Labor	The authorized activities for Unskilled Laborers include general manual labor activity (for example a driller's helper). Assume no per diem allowance.
12	Construction/Contracting Services Rates: Equipment Operator (Average Rate To Operate A Standard Piece Of Equipment)	The authorized activities for Equipment Operators include: operate heavy equipment including backhoes, dump trucks, excavators, loaders, and drill rigs (driller only), etc. Assume no per diem allowance.
13	Fieldwork Per Diem Without Overnight Stay	Fieldwork Per Diem Without Overnight Stay requires a minimum 10 hour day and is applicable to <u>both</u> consultants and contractors.
14	Fieldwork Per Diem With Overnight Stay (Including Lodging)	Fieldwork Per Diem With Overnight Stay (Including Lodging) is applicable to <u>both</u> consultants and contractors. An overnight stay is appropriate when time and/or distance prevents a return home at the end of a work day.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
15	Per Diem Requirement (# Miles Required)	The minimum distance from the nearest applicable office to the site (one-way) the consultant/contractor must travel to be eligible for per diem.
16	Consultant Mileage Rate	Company owned vehicle mileage rate. Note: The dollar per mile (\$/mile) mileage rate may not be marked up on a company-owned vehicle. A rental price and additional mileage charges for a company-owned vehicle may be reimbursed if the total cost is less than what the mileage cost ceiling will allow. Note: This rate would only be applied when other consultant mileage rate cost ceilings like mob/demob/travel cost for tank removal and closure; drilling; hydropunch and geoprobe sample collection, well abandonment by grouting, groundwater sampling and remedial activities, mobile lab, well development, soil gas surveying, etc. are not applicable.
17	Contractor Mileage Rate	Company owned vehicle mileage rate. Note: The dollar per mile (\$/mile) mileage rate may not be marked up on a company-owned vehicle. A rental price and additional mileage charges for a company-owned vehicle may be reimbursed if the total cost is less than what the mileage cost ceiling will allow. Note: This rate would only be applied when other contractor mileage rate cost ceilings like mob/demob/travel cost for tank removal and closure; drilling; hydropunch and geoprobe sample collection, well abandonment by grouting, groundwater sampling and remedial activities, mobile lab, well development, soil gas surveying, etc. are not applicable.
18	Consultant Cost: Mark-up % on Subcontractor Work	Mark-up on Subcontractor work.
19	Consultant Cost: Project Management (For All Site Work - SAF Preapproval only)	This activity is based on a fixed percentage of total project cost, (% of total project cost) for work proposed on each SAF preapproval application. The activities for this item typically involve general site administration, correspondence with regulatory agencies and clients, and all pre- and post-field planning and administrative activities.
20	Remedial Activities: Bulk Soil Excavation (Contaminated Soil) <=500 Tons	This activity consists of the estimated price per ton for the following item: Bulk Soil Excavation (Contaminated Soil) <=500 Tons

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
21	Remedial Activities: Bulk Soil Excavation (Contaminated Soil) > 500 Tons	This activity consists of the estimated price per ton for the following item: Bulk Soil Excavation (Contaminated Soil) > 500 Tons
22	Remedial Activities: Bulk Soil Transportation (Includes Loading, and Hauling Distances Up To 250 Miles Round Trip), All Ton Sizes	This activity consists of the estimated price per ton for the following item: Bulk Soil Transportation (Includes Loading Up To 250 Miles Round Trip)
23	Remedial Activities: Backfill (Labor, Hauling; Materials; Equipment; Compaction)	This activity consists of the estimated price per ton for the following item: Backfill (Labor, Hauling; Materials; Equipment; Compaction)
24	Remedial Activities: Landfill Disposal of Petroleum Contaminated Soil (PCS)	This activity consists of the total price per ton (\$/ton) for landfill disposal of PCS at a properly permitted landfill facility. Does not include mob/demob or transportation costs for equipment and/or personnel.
25	Remedial Activities: Thermal Remediation of PCS (Ex-Situ, On-Site, Portable Facility)	This activity consists of the total price per ton (\$/ton) for the following activity: On-site, ex-situ thermal remediation of PCS using a permitted portable facility.
26	Remedial Activities: Thermal Remediation of PCS (Ex-Situ, Off-Site, Fixed Facility)	This activity consists of the total price per ton (\$/ton) for the following activity: Off-site, ex-situ thermal remediation of PCS using a permitted fixed facility.
27	Remedial Activities: Bioremediation of PCS (Off-Site, Fixed Facility)	This activity consists of the total price per ton (\$/ton) for the following item: Off-site, ex-situ bioremediation of PCS at permitted fixed facility. Does not apply to on-site portable bioremediation facility.
28	LAB ANALYSIS: Total Petroleum Hydrocarbons (TPH) by 418.1 AZ/BLS - 181 (Soil Only)	LAB ANALYSIS (\$/test): Total Petroleum Hydrocarbons (TPH) by ADHS Method 418.1 AZ/BLS - 181 using an ADHS-certified laboratory (Soil Only).
29	LAB ANALYSIS: Total Petroleum Hydrocarbons (TPH) by EPA Method 418.1 (GW only)-- FOR WASTE CHARACTERIZATION AND PERMIT REQUIREMENT PURPOSES ONLY	LAB ANALYSIS (\$/test): Total Petroleum Hydrocarbons (TPH) by EPA Method 418.1 using an ADHS-certified laboratory (GW only)-- for waste characterization and permit requirement purposes only. <u>Note: This test is not to be used for UST regulatory purposes such as GW monitoring.</u>

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
30	LAB ANALYSIS: TPH by EPA Method 8015 (Soil)	LAB ANALYSIS (\$/test): Total Petroleum Hydrocarbons (TPH) by EPA Method 8015 using an ADHS-certified laboratory (Soil Only).
31	LAB ANALYSIS: TPH by EPA Method 8015 (GW Only)	LAB ANALYSIS (\$/test): Total Petroleum Hydrocarbons (TPH) by EPA Method 8015 using an ADHS-certified laboratory (GW Only).
32	LAB ANALYSIS: TPH by EPA/Method 8015 (modified) (Soil Only)	LAB ANALYSIS (\$/test): TPH by EPA Method 8015 (modified)/ADHS Method BLS-191 using an ADHS-certified laboratory (Soil Only).
33	LAB ANALYSIS: TPH - Diesel Range by BLS-191 (Soil Only)	LAB ANALYSIS (\$/test): TPH - Diesel Range by BLS-191 using an ADHS-certified laboratory (Soil Only)
34	LAB ANALYSIS: TPH by Method 8015AZ (C6 - C32) (Soil Only)	LAB ANALYSIS (\$/test): TPH by Method 8015AZ (C6 - C32) using an ADHS-certified laboratory (Soil Only)
35	LAB ANALYSIS: TPH by Method 8015AZ (C9 - C32) (Soil Only)	LAB ANALYSIS (\$/test): TPH by Method 8015AZ (C9 - C32) using an ADHS-certified laboratory (Soil Only)
36	LAB ANALYSIS: TPH by Method 8015AZ (C6 - C32) (GW Only)	LAB ANALYSIS (\$/test): TPH by Method 8015AZ (C6 - C32) using an ADHS-certified laboratory (GW Only)
37	LAB ANALYSIS: TPH by Method 8015AZ (C9 - C32) (GW Only)	LAB ANALYSIS (\$/test): TPH by Method 8015AZ (C9 - C32) using an ADHS-certified laboratory (GW Only)
38	LAB ANALYSIS: TPH by EPA Method 8015 (modified)/BLS 191 (Air Only)	LAB ANALYSIS (\$/test): TPH by EPA Method 8015 (modified)/ADHS Method BLS 191 using an ADHS-certified laboratory (Air Only).
39	LAB ANALYSIS: TPH/BTEX by EPA Method 8015 (modified)/8021 (Soil Only)	LAB ANALYSIS (\$/test): TPH/BTEX by EPA Method 8015 (modified)/8021 using an ADHS-certified laboratory (Soil Only).
40	LAB ANALYSIS: TPH/BTEX by EPA Method 8015 (modified)/8021 (Air Only)	LAB ANALYSIS (\$/test): TPH/BTEX by EPA Method 8015 (modified)/8021 using an ADHS-certified laboratory (Air Only).
41	LAB ANALYSIS: Aromatic VOCs by EPA 8020 (Soil Only)	LAB ANALYSIS (\$/test): Aromatic VOCs by EPA Method 8020 using an ADHS-certified laboratory (Soil Only).
42	LAB ANALYSIS: Aromatic VOCs by EPA 8021 (Soil Only)	LAB ANALYSIS (\$/test): Aromatic VOCs by EPA Method 8021 using an ADHS-certified laboratory (Soil Only).

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
43	LAB ANALYSIS: Aromatic VOCs by EPA 8020 (Air Only)	LAB ANALYSIS (\$/test): Aromatic VOCs by EPA Method 8020 using an ADHS-certified laboratory (Air Only).
44	LAB ANALYSIS: Aromatic VOCs by EPA 8021 (Air Only)	LAB ANALYSIS (\$/test): Aromatic VOCs by EPA Method 8021 using an ADHS-certified laboratory (Air Only).
45	LAB ANALYSIS: Halogenated VOCs by EPA Method 8010 (Soil Only)	LAB ANALYSIS (\$/test): Halogenated VOCs by EPA Method 8010 using an ADHS-certified laboratory (Soil Only).
46	LAB ANALYSIS: Halogenated VOCs by EPA Method 8021 (Soil Only)	LAB ANALYSIS (\$/test): Halogenated VOCs by EPA Method 8021 using an ADHS-certified laboratory (Soil Only).
47	LAB ANALYSIS: Halogenated VOCs by EPA Method 8010 (Air Only)	LAB ANALYSIS (\$/test): Halogenated VOCs by EPA Method 8010 using an ADHS-certified laboratory (Air Only).
48	LAB ANALYSIS: Halogenated VOCs by EPA Method 8021 (Air Only)	LAB ANALYSIS (\$/test): Halogenated VOCs by EPA Method 8021 using an ADHS-certified laboratory (Air Only).
49	LAB ANALYSIS: EPA Method 8010/8020 (Soil only)	LAB ANALYSIS (\$/test): EPA Method 8010/8020 using an ADHS-certified laboratory (Soil only).
50	LAB ANALYSIS: EPA 502.2 Target compounds including BTEX (GW Only)	LAB ANALYSIS (\$/test): EPA Method 502.2 Target compounds including BTEX using an ADHS-certified laboratory (GW Only).
51	LAB ANALYSIS: EPA 8021 Target compounds including BTEX (GW Only)	LAB ANALYSIS (\$/test): EPA Method 8021 Target compounds including BTEX using an ADHS-certified laboratory (GW Only).
52	LAB ANALYSIS: EPA 524 Target compounds including BTEX (GW Only)	LAB ANALYSIS (\$/test): EPA Method 524 Target compounds including BTEX using an ADHS-certified laboratory (GW Only).
53	LAB ANALYSIS: EPA 8260 Target compounds including BTEX (GW Only)	LAB ANALYSIS (\$/test): EPA Method 8260 Target compounds including BTEX using an ADHS-certified laboratory (GW Only).
54	LAB ANALYSIS: BTEX by EPA Method 503.1 (GW Only)	LAB ANALYSIS (\$/test): BTEX by EPA Method 503.1 using an ADHS-certified laboratory (GW Only).
55	LAB ANALYSIS: BTEX by EPA Method 8021 (GW Only)	LAB ANALYSIS (\$/test): BTEX by EPA Method 8021 using an ADHS-certified laboratory (GW Only).
56	LAB ANALYSIS: BTEX by EPA Method 502.2 (GW Only)	LAB ANALYSIS (\$/test): BTEX by EPA Method 502.2 using an ADHS-certified laboratory (GW Only).

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
57	LAB ANALYSIS: Lead by EPA Method 6010 (Soil Only)	LAB ANALYSIS (\$/test): Lead by EPA Method 6010 using an ADHS-certified laboratory (Soil Only).
58	LAB ANALYSIS: Purgeable Halocarbons by EPA Method 601 (GW Only)	LAB ANALYSIS (\$/test): Purgeable Halocarbons by EPA Method 601 using an ADHS-certified laboratory (GW Only).
59	LAB ANALYSIS: Purgeable Halocarbons by EPA Method 8021 (GW Only)	LAB ANALYSIS (\$/test): Purgeable Halocarbons by EPA Method 8021 using an ADHS-certified laboratory (GW Only).
60	LAB ANALYSIS: Purgeable Halocarbons by EPA Method 602 (GW Only)	LAB ANALYSIS (\$/test): Purgeable Halocarbons by EPA Method 602 using an ADHS-certified laboratory (GW Only).
61	LAB ANALYSIS: Aromatic Target List by EPA Method 8021 (GW Only)	LAB ANALYSIS (\$/test): Aromatic Target List by EPA Method 8021 using an ADHS-certified laboratory (GW Only).
62	LAB ANALYSIS: EPA Method 601/602 (GW Only)	LAB ANALYSIS (\$/test): EPA Method 601/602 using an ADHS-certified laboratory (GW Only).
63	LAB ANALYSIS: Full List Volatile Organics by EPA Method 8021 (GW only)	LAB ANALYSIS (\$/test): Full List Volatile Organics by EPA Method 8021 using an ADHS-certified laboratory (GW only).
64	LAB ANALYSIS: Full List Volatile Organics by EPA Method 8021 (Soil)	LAB ANALYSIS (\$/test): Full List Volatile Organics by EPA Method 8021 using an ADHS-certified laboratory (Soil).
65	LAB ANALYSIS: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8310 (Soil Only)	LAB ANALYSIS (\$/test): Polynuclear Aromatic Hydrocarbons EPA Method (PAHs) by 8310 using an ADHS-certified laboratory (Soil Only).
66	LAB ANALYSIS: Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8310 (GW Only)	LAB ANALYSIS (\$/test): Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8310 using an ADHS-certified laboratory (GW Only).
67	LAB ANALYSIS: Semi-Volatile Organics by EPA Method 8270 (Soil Only)	LAB ANALYSIS (\$/test): Semi-Volatile Organics by EPA Method 8270 using an ADHS-certified laboratory (Soil Only).
68	LAB ANALYSIS: Semi-Volatile Organics by EPA Method 8270 (GW Only)	LAB ANALYSIS (\$/test): Semi-Volatile Organics by EPA Method 8270 using an ADHS-certified laboratory (GW Only).

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
69	LAB ANALYSIS: EPA Method 8100 (Soil Only)	LAB ANALYSIS (\$/test): EPA Method 8100 using an ADHS-certified laboratory (Soil Only).
70	LAB ANALYSIS: EPA Method 8100 (GW Only)	LAB ANALYSIS (\$/test): EPA Method 8100 using an ADHS-certified laboratory (GW Only).
71	LAB ANALYSIS: Igniteability Test by EPA Method 1010 (Liquid Only)	LAB ANALYSIS (\$/test): Igniteability by EPA Method 1010 using an ADHS-certified laboratory (Liquid Only).
72	LAB ANALYSIS: Igniteability Test by EPA Method 1010 (Soil Only)	LAB ANALYSIS (\$/test): Igniteability Test by EPA Method 1010 using an ADHS-certified laboratory (Soil Only).
73	LAB ANALYSIS: Corrositivity pH by EPA Method 9045 (Soil Only)	LAB ANALYSIS (\$/test): Corrositivity pH by EPA Method 9045 pH using an ADHS-certified laboratory (Soil Only).
74	LAB ANALYSIS: Corrositivity pH by EPA Method 9045 (GW Only)	LAB ANALYSIS (\$/test): Corrositivity pH by EPA Method 9045 pH using an ADHS-certified laboratory (GW Only).
75	LAB ANALYSIS: Paint Filter Free Liquids by EPA Method 9095	LAB ANALYSIS (\$/test): Paint Filter Free Liquids by EPA Method 9095 using an ADHS-Certified laboratory.
76	LAB ANALYSIS: Phosphate-P by Waste Water Method 365 (modified) (Soil Only)	LAB ANALYSIS (\$/test): Phosphate-P by Waste Water Method 365 (modified) using an ADHS-Certified laboratory (Soil Only)
77	LAB ANALYSIS: Nitrate + nitrite-N by Waste Water Method 353 (modified) (Soil Only)	LAB ANALYSIS (\$/test): Nitrate + nitrite-N by Waste Water Method 353 (modified) using an ADHS-Certified laboratory (Soil Only).
78	LAB ANALYSIS: (Half Day Rate) On-Site Mobile Lab Rate for One Person Crew - Soil and GW analyses	LAB ANALYSIS: Total On-site Mobile Lab Rate (\$/Half Day) for Soil and GW analyses. Mobile Lab must be ADHS-certified. Assume one person crew.
79	LAB ANALYSIS: (Half Day Rate) On-Site Mobile Lab Rate for Two Person Crew - Soil and GW analyses	LAB ANALYSIS: Total On-site Mobile Lab Rate (\$/Half Day) for Soil and GW analyses. Mobile Lab must be ADHS-certified. Assume two person crew.
80	LAB ANALYSIS: (Daily Rate) On-Site Mobile Lab Rate for One Person Crew - Soil and GW	LAB ANALYSIS: Total On-site Mobile Lab Rate (\$/Day) for Soil and GW analyses. Mobile Lab must be ADHS-certified. Assume one person crew.
81	LAB ANALYSIS: (Daily Rate) On-Site Mobile Lab Rate for Two Person Crew - Soil and GW analyses	LAB ANALYSIS: Total On-site Mobile Lab Rate (\$/Day) for Soil and GW analyses. Mobile Lab must be ADHS-certified. Assume two person crew.



**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
82	Equipment Rental: Decon Equipment (Buckets/Brushes/Detergent)	Equipment Rental: Daily rate (\$/day) for Decon Equipment including Buckets/Brushes/Detergent etc.
83	Equipment Rental: Hand Auger Sampling Kit (Hand Auger/Brass Sleeves)	Equipment Rental: Daily rate (\$/day) for Hand Auger and Sampling Kit (Hand Auger, Brass Sleeves, etc.).
84	Equipment Rental: Slide Hammer Core Sampler	Equipment Rental: Daily rate (\$/day) for Slide Hammer Core Sampler.
85	Equipment Rental: Photoionization Detector	Equipment Rental: Daily rate (\$/day) for Photoionization Detector (PID).
86	Equipment Rental: Flame Ionization Detector (FID)	Equipment Rental: Daily rate (\$/day) for Flame Ionization Detector (FID).
87	Equipment Rental: LEL/02 Meter	Equipment Rental: Daily rate (\$/day) for LEL/02 Meter .
88	Equipment Rental: pH, temperature and conductivity meter	Equipment Rental: Daily rate (\$/day) for pH, temperature and conductivity meter.
89	Equipment Rental: Dissolved Oxygen Meter	Equipment Rental: Daily rate (\$/day) for Dissolved Oxygen Meter.
90	Equipment Rental: 2-inch Environmental Submersible Pump	Equipment Rental: Daily rate (\$/day) for a 2-inch environmental submersible pump; includes all ancillary equipment other than a generator.
91	Equipment Rental: 4-inch Environmental Submersible Pump	Equipment Rental: Daily rate (\$/day) for a 4-inch environmental submersible pump; includes all ancillary equipment other than a generator.
92	Equipment Rental: Tedlar Bag Sampler	Equipment Rental: Daily rate (\$/day) for a Tedlar Bag Sampler This refers to instrumentation and pump only.
93	Equipment Rental: Portable Vapor Extraction System (VES) Pilot Test Unit	Equipment Rental: Daily rate (\$/day) for a Portable VES Pilot Test Unit; includes all ancillary equipment (other than a generator) and permitting fees if applicable.
94	Equipment Rental: Portable Generator, <= 5 kW	Equipment Rental: Daily rate (\$/day) for a Portable Generator, <= 5 kW .
95	Equipment Rental: Portable Generator, 5kW < Generator <= 10 kW	Equipment Rental: Daily rate (\$/day) for a Portable Generator, 5kW < Generator <= 10 kW .
96	Equipment Rental: Steam Cleaner/Pressure Washer	Equipment Rental: Daily rate (\$/day) for a Steam Cleaner/Pressure Washer.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
97	Equipment Rental: Water Level Indicator	Equipment Rental: Daily rate (\$/day) for a Water Level Indicator which includes either an electrical or mechanical device.
98	Equipment Rental: Oil/Water Interface Probe	Equipment Rental: Daily rate (\$/day) for an Oil/Water Interface Probe.
99	Equipment Rental: Contractor Heavy Duty Service Truck (includes tools and equipment)	Equipment Rental: Daily rate (\$/day) for a Contractor's Heavy Duty Service Truck (includes tools and equipment). May be applied to a utility truck outfitted with sampling and/or construction equipment that may be utilized for well development, well purging, as well as operation and maintenance of remediation systems.
100	Equipment Rental: Bailer Rental	Equipment Rental: Daily rate (\$/day) for non-disposable bailer.
101	Equipment Rental: Anemometer	Equipment Rental: Daily rate (\$/day) for an Anemometer.
102	Equipment Rental: CO <sub>2</sub> Meter	Equipment: Daily rate (\$/day) for field equipment used to measure carbon dioxide (CO <sub>2</sub> ).
103	Equipment Rental: VES System with Thermal Oxidizer (100 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.
104	Equipment Rental: VES System with Thermal Oxidizer (250 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
105	Equipment Rental: VES System with Thermal Oxidizer (500 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.
106	Equipment Rental: VES System with Thermal Oxidizer (750 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and thermal oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis. Does not include cost of utilities to operate the system.
107	Equipment Rental: VES System with Catalytic Oxidizer (100 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.
108	Equipment Rental: VES System with Catalytic Oxidizer (250 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
109	Equipment Rental: VES System with Catalytic Oxidizer (500 cfm)	Equipment Rental: Equipment rental (\$/month) to include skid or trailer mounted vapor extraction equipment including vacuum blower and water knockout, and catalytic oxidizer with appropriate gauges and equipment necessary to monitor system effectiveness and meet appropriate permitting (and other) regulatory requirements. Cost includes a chart recorder capable of recording on a weekly or monthly basis and catalyst beds capable of achieving at least 90% destruction efficiency. Does not include cost of utilities to operate the system.
110	Equipment Rental: Air Sparge System (up to 100 cfm and up to 12 psi)	Equipment Rental: Equipment rental (\$/month) to include skid mounted air sparge system including blower or compressor to generate up to 100 cfm flow rate and up to 12 psi pressure, and appropriate gauges and control panel. Does not include cost of utilities to operate the system.
111	Equipment Rental: Air Sparge System (up to 100 cfm and 13 to 100 psi)	Equipment Rental: Equipment rental (\$/month) to include skid mounted air sparge system including blower or compressor to generate up to 100 cfm flow rate and between 13 and 100 psi pressure, and appropriate gauges and control panel. Does not include cost of utilities to operate the system.
112	Equipment Rental: Blower, Rotron 505, 160 CFM	Equipment Rental: Equipment rental (\$/month) for a Blower: Rotron 505, 160 CFM
113	Equipment Rental: Blower, Rotron 707, 280 CFM	Equipment Rental: Equipment rental (\$/month) for a Blower: Rotron 707, 280 CFM
114	Equipment Cost: Disposable Bailers	Equipment Cost: Total cost per bailer (\$/bailer) for a disposable bailer.
115	Equipment Cost: 55 Gallon Drum (new)	Equipment Cost: Total cost per drum (\$/drum) for a 55 Gallon Drum (new).
116	Equipment Cost: 55 Gallon Drum (reconditioned)	Equipment Cost: Total cost per drum (\$/drum) for a 55 Gallon Drum (reconditioned).
117	14-Day Letter	This activity consists of the total personnel, equipment, and material costs (\$/report) required to prepare and submit the one to two page release verification letter (14-Day Letter) in accordance with ADEQ release requirements. Note: This activity also includes telephone call for 24 hour release notification.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
118	Initial Health and Safety Plan	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: Prepare Initial Health and Safety Plan in accordance with OSHA requirements for all planned activities. This activity includes time for review; clerical support; and all other direct costs such as copying and binding.
119	Subsequent Health and Safety Plan	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: Prepare Subsequent Health and Safety Plan modifications in accordance with OSHA requirements for subsequent activities not reasonably anticipated in the Initial Health and Safety Plan.
120	Approved Work plan for Initial Site Characterization (SAF Preapproval Only)	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete an initial site characterization work plan. The plan must provide information set forth in Rule R18-12-607.01 (F)(7)(b). Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. Note: This activity only applies to an applicant who elects to pursue pre-approval of an initial site characterization investigation.
121	Approved Site Characterization Work Plan Scenario 1: Soil Only	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: prepare site specific work plan as required by ADEQ or for SAF pre-approval purposes. This report includes property background, UST history discussion, and discussion of proposed activities and preparation of cost estimates and budgets. Report costs include: senior level review of document, clerical support, and all other direct costs such as copying and binding. Note: This item does not include SAF application preparation.
122	Approved Site Characterization Work Plan Addendum Scenario 1: Soil Only	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: prepare site-specific ADEQ approved work plan addendum for SAF pre-approval purposes. Report costs include: senior level review of document, clerical support, and all other direct costs such as copying and binding. Note: This item does not include SAF application preparation or technical and/or administrative deficiencies identified in the original work plan.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
123	Approved Site Characterization Work Plan Scenario 2: Soil and Groundwater	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: prepare site-specific ADEQ approved work plan for SAF pre-approval purposes. This report includes property background, UST history discussion, and discussion of proposed activities and preparation of cost estimates and budgets. Report costs include: senior level review of document, clerical support, and all other direct costs such as copying and binding. Note: This item does not include SAF application preparation or technical and/or administrative deficiencies identified in the original work plan.
124	Approved Site Characterization Work Plan Addendum Scenario 2: Soil and Groundwater	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete the following activities: prepare site-specific ADEQ approved work plan addendum for SAF pre-approval purposes. Report costs includes: senior document review, clerical support, and all other direct costs such as copying and binding. Note: This item does not include SAF application preparation or technical and/or administrative deficiencies identified in the original work plan.
125	Contractor Cost: Soil Boring and Sampling, Hollow Stem Auger, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths less than 100 feet.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
126	Contractor Cost: Soil Boring and Sampling, Hollow Stem Auger, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths greater than or equal to 100 feet.
127	Contractor Cost: Soil Boring and Sampling, Limited Access Drilling for Hollow-Stem Auger < 100 Feet	This activity consists of the total cost per foot (\$/foot) per boring for the following activities performed according to ASTM Standards: drilling; sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers; containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or a roll-off bin, transportation, and/or disposal. Costs also should not consider mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths less than 100 feet.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
128	Contractor Cost: Soil Boring and Sampling, Limited Access Drilling for Hollow-Stem Auger >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per boring for the following activities performed according to ASTM Standards: drilling; sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers; containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or a roll-off bin, transportation, and/or disposal. Costs also should not consider mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths greater than or equal to 100 feet.
129	Contractor Cost: Soil Boring and Sampling, Air Rotary, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths less than 100 feet.



**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
130	Contractor Cost: Soil Boring And Sampling, Air Rotary, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths greater than or equal to 100 feet.
131	Contractor Cost: Soil Boring And Sampling, Rotosonic, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths less than 100 feet.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
132	Contractor Cost: Soil Boring And Sampling, Rotosonic, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths greater than or equal to 100 feet.
133	Contractor Cost: Soil Boring And Sampling, Dual Wall Percussion Drill Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths less than 100 feet.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
134	Contractor Cost: Soil Boring And Sampling, Dual Wall Percussion Drill Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per vertical boring for the following activities performed according to ASTM Standards: drilling; typical sampling at approximate 5 foot intervals; temporarily stockpiling soil on visqueen; site clean-up; moving between boreholes; brass sleeves, and associated sample preservation material; drilling consumables/bits; decontamination equipment; and any necessary drilling contractor support equipment. Necessary drilling contractor support equipment includes: drill rig, support trucks, and decontamination equipment including steam cleaners, pressure washers, decontamination-trailers, containment materials for <u>decontamination residuals</u> such as visqueen, and berm materials. This item does not include soil/groundwater (i.e., drill cuttings and development water) containment in either drums or roll-off bin, transportation, and/or disposal. Costs also should not consider angle drilling, limited access drilling with non-standard rig configurations, mob/demob, travel, standby time or concrete/asphalt coring and replacement. Note: This item applies to ALL borings drilled at depths greater than or equal to 100 feet.
135	Contractor Cost: Soil Boring And Sampling Make Ready/Preparation Cost, Hollow Stem Auger	This activity consists of the total personnel, equipment and material costs (\$/event) for the following activities: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles. Assume no travel time. Note: This is a one-time charge per job.
136	Contractor Cost: Soil Boring And Sampling Make Ready/Preparation Cost, ALL OTHER RIGS	This activity consists of the total personnel, equipment and material costs (\$/event) or the following activities: preparation and loading of all appropriate equipment, materials, and supplies, including support vehicles. Assume no travel time. Note: This is a one-time charge per job.
137	Contractor Cost: Soil Boring And Sampling Equipment Mob/Demob/Travel, Hollow Stem Auger	This activity consists of the total personnel, equipment and material costs (\$/mile) necessary for the following activities: rig, support vehicles and equipment decontamination; and travel to and from the site. Note: This is a one-time charge per job.
138	Contractor Cost: Soil Boring And Sampling Equipment Mob/Demob/Travel, ALL OTHER RIGS	This activity consists of the total personnel, equipment and material costs (\$/mile) necessary for the following activities: rig, support vehicles and equipment decontamination; and travel to and from the site. Note: This is a one-time charge per job.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
139	Contractor Standby Rate, Hollow Stem Auger	This activity consists of the hourly standby rate (\$/hour) for a hollow stem auger. Rates are reimbursable for down-time due to circumstances beyond the contractor's control (i.e., waiting on laboratory results and consultant discussions). Note: This item does not include downtime resulting from mechanical failures.
140	Contractor Standby Rate, ALL OTHER RIGS	This activity consists of the hourly standby rate (\$/hour) for all non-HSA rigs. Rates are reimbursable for down-time due to circumstances beyond the contractor's control (i.e., waiting on laboratory results and consultant discussions). Note: This item does not include downtime resulting from mechanical failures.
141	Contractor Cost: Concrete Coring and Replacement	This activity consists of the cost per boring (\$/boring) for concrete coring and replacement. This activity is only associated with the bore hole and does not include repairs or replacement of surface pavement otherwise damaged during drilling.
142	Contractor Cost: Concrete Replacement	This activity consist of the total cost per square foot (\$/square foot) to sawcut, remove, and replace concrete damaged adjacent to the borehole during drilling or damaged during remedial system installation. This item includes loading, transportation and disposal of construction debris.
143	Contractor Cost: Asphalt Coring and Replacement	This activity consists of the total cost per boring (\$/boring) for asphalt coring and replacement. This activity is only associated with the bore hole and does not include repairs or replacement of surface pavement otherwise damaged during drilling.
144	Contractor Cost: Asphalt Replacement	This activity consist of the total cost per square foot (\$/S.F.) to sawcut, remove, and replace asphalt damaged adjacent to the borehole during drilling or damaged during remedial system installation. This item includes loading, transportation and disposal of construction debris.
145	Contractor Cost: Utility Locator Service, On-Site Cost	This activity consists of the total on-site cost (\$/hour) for a contractor to conduct a sub-grade utility clearance survey. Assume no travel in this item.
146	Contractor Cost: Utility Locator Service, Travel Cost	This activity consists of the total travel cost (\$/hour) including personnel and materials for a contractor to conduct a sub-grade utility clearance survey.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
147	Contractor Cost: Professional Survey of Groundwater Monitor Wells	This activity consists of the total cost per well (\$/well) to establish a vertical elevation based at the top of casing in accordance with ADEQ LUST Site Characterization Guidance (Revised July, 1996). Assumes that a well defined benchmark exists near the site and that a two person survey crew will be used.
148	Contractor Cost: Active Soil Gas Surveys: (Daily Rate)	This activity consists of the total cost per day for an Active Soil Gas Survey (\$/Day) using an ADHS-certified laboratory. Assume typical site clean-up.
149	Contractor Cost: Active Soil Gas Surveys: (Half Day Rate)	This activity consists of the total cost per half-day for an Active Soil Gas Survey (\$/Half Day) using an ADHS-certified laboratory. Assume typical site clean-up.
150	Consultant Cost: Grab or Surface Water Sampling	This activity consists of the total personnel, equipment, and material costs (\$/sample) to collect grab or surface water samples. Does not include travel.
151	Contractor Cost: Hydropunch Groundwater Sample Collection From Soil Boring (Half Day Rate)	This activity consists of the total half day rate (\$/Half Day) for the drilling contractor's time, expendables and sample equipment to collect a hydropunch groundwater sample and conduct necessary site clean-up. Assume costs are based on advancing hydropunch sampler to a depth approximately 5 feet below the drill stem. Costs for the hydropunch are for the sample collection only, and assumes that the boring has already been advanced.
152	Contractor Cost: Hydropunch Groundwater Sample Collection From Soil Boring ( Daily Rate)	This activity consists of the total daily rate (\$/Day) for the drilling contractor's time, expendables and sample equipment to collect a hydropunch groundwater sample and conduct necessary site clean-up. Assume costs are based on advancing hydropunch sampler to a depth approximately 5 feet below drill stem. Costs for the hydropunch are for the sample collection only, and assumes that the boring has already been advanced.
153	Contractor Cost: Hydropunch Groundwater Sample Collection From Soil Boring ( Half Day Rate)	This activity consists of the total half day rate (\$/Half Day) for the drilling contractor's time, expendables and sample equipment to collect a hydropunch groundwater sample and conduct necessary site clean-up. Assume costs are based on advancing hydropunch sampler to a depth approximately 15 feet below ground level. Costs for the hydropunch are for the sample collection only, and assumes that the boring has already been advanced.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
154	Contractor Cost: Hydropunch Groundwater Sample Collection (Daily Rate)	This activity consists of the total daily rate (\$/Day) for the drilling contractor's time, expendables and sample equipment to collect a hydropunch groundwater sample and conduct necessary site clean-up. Assume costs are based on advancing hydropunch sampler to a depth approximately 15 feet below ground level. Costs for the hydropunch are for the sample collection only, and assumes that the boring has already been advanced.
155	Soil Boring Abandonment by Grout: Contractor Cost, Boring Diameter < 8"	This activity consists of the total cost per foot (\$/foot) per boring for the labor and materials associated with the abandonment of soil borings by grouting. Assume no mob/demob or mileage.
156	Soil Boring Abandonment by Grout: Contractor Cost, Boring Diameter 8" To 10"	This activity consists of the total cost per foot (\$/foot) per boring for the labor and materials associated with the abandonment of soil borings by grouting. Assume no mob/demob or mileage.
157	Soil Boring Abandonment by Grout: Contractor Cost, Boring Diameter >= 10"	This activity consists of the total cost per foot (\$/foot) per boring for the labor and materials associated with the abandonment of soil borings by grouting. Assume no mob/demob or mileage.
158	Installation Of 2" Wells By Hollow Stem Auger, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
159	Installation of 2" Wells By Hollow Stem Auger, > = 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
160	Installation of 2" Wells By Air Rotary Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
161	Installation Of 2" Wells by Air Rotary Rig, > = 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
162	Installation Of 2" Wells by Rotosonic Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].



**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
163	Installation Of 2" Wells By Rotosonic Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
164	Installation Of 2" Wells By Dual Wall Percussion Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
165	Installation Of 2" Wells By Dual Wall Percussion Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
166	Installation Of 4" Wells By Hollow Stem Auger, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
167	Installation Of 4" Wells By Hollow Stem Auger, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
168	Installation Of 4" Wells By Air Rotary Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
169	Installation Of 4" Wells By Air Rotary Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
170	Installation Of 4" Wells By Rotosonic Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
171	Installation Of 4" Wells By Rotasonic Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
172	Installation Of 4" Wells By Dual Wall Percussion Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
173	Installation Of 4" Wells By Dual Wall Percussion Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
174	Installation Of 6" Wells By Hollow Stem Auger, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
175	Installation Of 6" Wells By Hollow Stem Auger, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
176	Installation Of 6" Wells By Air Rotary Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
177	Installation Of 6" Wells By Air Rotary Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
178	Installation Of 6" Wells By Rotosonic Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables/bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].



**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
179	Installation Of 6" Wells By Rotosonic Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables /bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen),, transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
180	Installation Of 6" Wells By Dual Wall Percussion Rig, < 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables /bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths less than 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
181	Installation Of 6" Wells By Dual Wall Percussion Rig, >= 100 Feet	This activity consists of the total cost per foot (\$/foot) per well for the following items/activities: drill rig support vehicles and crew; soil sampling at approximate 5 foot intervals; decontamination procedures; sampling equipment; moving between wells; brass sleeves and associated sample preservation materials; drilling consumables /bits; well installation; well materials. Surface completion is not included in the per foot costs for drilling and well installation. Storage (stockpile of soil on visqueen), transportation and disposal of drill cuttings, decontaminate rinsate, and additional investigation-derived fluids is not included in the well installation item rate. This item applies to ALL well footage drilled and installed at depths greater than or equal to 100 feet. Assume no concrete coring, no restricted access, no nested well configuration, no mob/demob or travel. [When calculating costs for a typical site, assume schedule 40 PVC piping and 30 feet of screen interval].
182	Surface Well Completion - Contractor Cost Scenario 1: Access Manhole <=12"	This activity consists of the total personnel, equipment and material costs (\$/well) required to install a 2 foot square or less concrete pad with traffic rated (flush) manhole/vault. Assume no sawcutting, mob/demob or travel.
183	Surface Well Completion - Contractor Cost Scenario 2: Access Manhole > 12" To <= 24"	This activity consists of the total personnel, equipment and material costs (\$/well) required to install a 3 foot square or less concrete pad with traffic rated (flush) manhole/vault. Assume no sawcutting, mob/demob or travel.
184	Well Development Contractor Cost Scenario 1: 2" Well Development Cost < 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths less than 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
185	Well Development Contractor Cost Scenario 1: 2" Well Development Cost, ≥ 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths greater than or equal to 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.
186	Well Development Contractor Cost Scenario 2: 4" Well Development Cost, < 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths less than 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.
187	Well Development Contractor Cost Scenario 2: 4" Well Development Cost ≥ 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths greater than or equal to 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
188	Well Development Contractor Cost Scenario 3: 6" Well Development Cost, < 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths less than 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.
189	Well Development Contractor Cost Scenario 3: 6" Well Development Cost, ≥ 100 Feet	This activity consists of the total personnel, equipment and material costs (\$/well) required to develop a newly installed monitoring well in accordance with the current published ADEQ Quality Assurance Plan and includes all appropriate surface and downhole equipment, field instrumentation, and decontamination equipment. This item applies to ALL well development contractor costs at depths greater than or equal to 100 feet. Assume no low yield wells, no mob/demob/travel, typical site clean-up, and no consultant supervision cost. This activity does not pertain to purging associated with quarterly groundwater monitoring. Note: Containment, storage, transportation and disposal of investigation-derived waste is not included.
190	Remedial Well Abandonment By Grouting, Well diameter ≤ 2-inch	This activity consists of the total cost per foot (\$/foot) per well for well abandonment and to conduct necessary site clean-up. Assume no mob/demob or travel time. Grouting costs do not include removal or drilling out of casing.
191	Remedial Well Abandonment By Grouting, Well diameter > 2-inch to ≤ 4-inch	This activity consists of the total cost per foot (\$/foot) per well for well abandonment and to conduct necessary site clean-up. Assume no mob/demob or travel time. Grouting costs do not include removal or drilling out of casing.
192	Remedial Well Abandonment By Grouting, Well Diameter > 4-inch	This activity consists of the total cost per foot (\$/foot) per well for well abandonment. Assume no mob/demob or travel time. Grouting costs do not include removal or drilling out of casing.
193	Well Abandonment By Grouting Make Ready/Preparation Cost	This activity consists of the total personnel, equipment, and material costs (\$/event) necessary for the following activities: preparation and loading of all appropriate equipment, materials and supplies, including support vehicles. Assume no travel time. Note: This is a one time charge.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
194	Well Abandonment By Grouting Mob/Demob/Travel Cost	This activity consists of the total personnel, equipment, and material costs (\$/mile) necessary for the following activities: rig, support vehicles, and equipment decontamination; and travel to and from the site. Note: This is a one time charge.
195	Well Abandonment By Drill Out (From ground surface down to a depth of 20 feet)	This activity consists of the total personnel, equipment, and material costs (\$/well) necessary for well abandonment by drilling out the top 20 feet of well casing. This rate does not include costs to grout the well, or material handling and disposal. Assume no mob/demob or travel time.
196	Interim Status Report	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete an interim status report in accordance with SCRF guidelines. The report should be submitted for reimbursement only in cases where the site has not been fully characterized and where a final SCRF report has not been submitted. Field time or pilot and feasibility tests are not considered in report preparation.
197	Site Characterization Report Consultant Cost Scenario 1: Up To 7 Borings	This activity consists of the total personnel, equipment, and material costs (\$/report) to complete the Site Characterization Report Form (SCRF). The SCRF should include data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ SCRF guidance. Required attachments to the SCRF include a site location map, site plan, soil contamination map, geologic cross sections, soil sampling analytical results, laboratory reports, chain-of-custody and laboratory QA/QC reports. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. The Site Characterization Report Form should only be submitted if the consultant believes the SCRF defines the extent of the contamination. Otherwise, the consultant should provide an Interim Status Report. Field time or pilot and feasibility tests are not included in report preparation activity.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
198	Site Characterization Report Consultant Cost Scenario 2: Up To 5 Wells	This activity consists of the total personnel, equipment, and material costs (\$/report) to complete the Site Characterization Report Form (SCRF). The SCRF should include data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ SCRF guidance. Required attachments to the SCRF include a site location map, site plan, soil contamination map, geologic cross sections, soil sampling analytical results, laboratory reports, chain-of-custody and laboratory QA/QC reports. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. The Site Characterization Report Form should only be submitted if the consultant believes the SCRF defines the extent of the contamination. Otherwise, the consultant should provide an Interim Status Report. Field time or pilot and feasibility tests are not included in report preparation activity.
199	Site Characterization Report Consultant Cost Scenario 3: Up To 7 Borings & 5 Wells	This activity consists of the total personnel, equipment, and material costs (\$/report) to complete the Site Characterization Report Form (SCRF). The SCRF should include data collection, evaluation and documentation including all figures and reports in the format specified by the ADEQ SCRF guidance. Required attachments to the SCRF include a site location map, site plan, soil contamination map, geologic cross sections, soil sampling analytical results, laboratory reports, chain-of-custody and laboratory QA/QC reports. Activities include the personnel time for preparation of the report including time for review, clerical support, and all other direct costs such as copying and binding. The Site Characterization Report Form should only be submitted if the consultant believes the SCRF defines the extent of the contamination. Otherwise, the consultant should provide an Interim Status Report. Field time or pilot and feasibility tests are not included in report preparation activity.
200	Pilot Testing: Soil Vapor Extraction (SVE)	This activity consists of the total personnel, SVE test equipment, and material costs (\$/event) required to conduct an 8-hour (multiple stepped) soil vapor extraction pilot test. Cost assumes one test utilizing one central vapor extraction and up to five lateral monitoring points. Cost includes field supervision, project logistics, data logging, collection of vapor samples, data analysis, and data compilation. Cost does not include well installation, containerization, transportation or disposal of test-derived waste.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
201	Pilot Testing: SVE/ Air Sparge	This activity consists of the total personnel, SVE and Air Sparge test equipment, and material costs (\$/event) required to conduct a 10-hour (multiple stepped) combination SVE and Air Sparge pilot test. Cost assumes utilization of one central vapor extraction well and one air sparge well and up to five lateral monitoring points. Cost includes field supervision, project logistics, data logging, collection of vapor and groundwater samples, data analysis, and data compilation. Does not include containerization, transportation or disposal of test-derived waste.
202	Pilot Testing: Bioventing/Respiration	This activity consists of the total personnel, bioventing pilot test equipment, and material costs (\$/event) required to conduct an 8-hour (multiple stepped) air injection pilot test and follow up respiration monitoring. Cost assumes one test utilizing one central air injection well and up to five lateral monitoring points. Cost further assumes an additional three day follow-up period for respiration monitoring (one two-hour respiration monitoring period per day). Cost includes field supervision, project logistics, data recording, collection of vapor samples, data analysis, and data compilation. Does not include well installation or containerization, transportation or disposal of test-derived waste.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
203	Approved Corrective Action Plan (CAP)	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete a CAP which receives <u>final approval</u> in accordance with ADEQ requirements. The CAP must include the findings of the site characterization investigation, a comparison of three possible remediation methods (one of which must be natural attenuation), and a recommendation as to which method should be implemented. This recommendation must be justified in terms of cost effectiveness and technical feasibility. The CAP must also include a full description of how the remedial method will be implemented, a schedule for the initiation and completion of corrective action activities following plan approval, and a detailed schedule for periodic monitoring and reporting. Activities include the personnel time for preparation of an approved CAP including time for review, clerical support, and all other direct costs such as copying or binding. Assume that ADEQ will provide the public notice and receive public comment, and that no public meetings will be required. ADEQ requests CAPs for sites where groundwater or surface water is contaminated in excess of water quality standards, or where free product is present. CAPs are not requested for sites with only soil contamination where no threat of groundwater contamination exists. NOTE: The CAP is submitted to satisfy the requirements of 40 CFR 280.66-67, and is not an SAF pre-approval work plan.
204	SAF Work plan for In-Situ & Ex-Situ Soil Remediation (SAF Pre-approval Only)	This activity consists of the total personnel, equipment, and material costs (\$/report) required to complete an <u>approved</u> Soil Remediation Work plan. The Work plan must be prepared in accordance with R18-12-607.01 (H) and (I). Activities for the report include the personnel time for preparation of an approved Soil Remediation Work plan, including time for review, clerical support, and all other direct costs such as copying or binding. A Soil Remediation Work plan is appropriate for sites requiring soil remediation only.
205	Consultant Preparation of SAF Work Plan to Implement Approved CAP	This activity consists of consultant preparation of SAF Work plan to Implement Approved CAP (\$/report). Since a CAP may cover a more comprehensive scope of work than is feasible to budget at one time, SAF work plans to implement a phase of the CAP may be submitted. The work plan must be prepared in accordance with R18-607.01 (H), and approved by the ADEQ Case Manager. This item is for SAF pre-approval work plan purposes only, and does not include costs for preparation of the SAF pre-approval application.



**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
206	Groundwater Monitoring Sampling Fieldwork Scenario 1: 2-inch Well < 100 Feet (Compliance Sampling Methodology--PURGING IS REQUIRED)	This activity consists of a dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.
207	Groundwater Monitoring Sampling Fieldwork Scenario 1: 2" Well < 100 Feet (Investigative Methodology --PURGING IS NOT REQUIRED)	This activity consists of a dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.
208	Groundwater Monitoring Sampling Fieldwork Scenario 1: 2" Well >= 100 Feet (Compliance Methodology -- PURGING IS REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
209	Groundwater Monitoring Sampling Fieldwork Scenario 1: 2" Well >= 100 Feet (Investigative Methodology -- PURGING IS NOT REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.
210	Groundwater Monitoring Sampling Fieldwork Scenario 2: 4" Well < 100 Feet (Compliance Methodology --PURGING IS REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.
211	Groundwater Monitoring Sampling Fieldwork Scenario 2: 4" Well < 100 Feet (Investigative Methodology --PURGING IS NOT REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
212	Groundwater Monitoring Sampling Fieldwork Scenario 2: 4" Well >= 100 Feet (Compliance Methodology -- PURGING IS REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.
213	Groundwater Monitoring Sampling Fieldwork Scenario 2: 4" Well >= 100 Feet (Investigative Methodology -- PURGING IS NOT REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.
214	Groundwater Monitoring Sampling Fieldwork Scenario 3: 6" Well < 100 Feet (Compliance Methodology --PURGING IS REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
215	Groundwater Monitoring Sampling Fieldwork Scenario 3: 6" Well < 100 Feet (Investigative Methodology --PURGING IS NOT REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths less than 100 feet. Fluid containment, transportation and disposal is not included.
216	Groundwater Monitoring Sampling Fieldwork Scenario 3: 6" Well >= 100 Feet (Compliance Methodology -- PURGING IS REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well purging and sampling; necessary purging and sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS required for sampling (i.e. compliance sampling). Assume no low yields. Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, instrumentation (pump, PID, pH/EC/Temperature/Conductivity meter, mobile phone, etc.), sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.
217	Groundwater Monitoring Sampling Fieldwork Scenario 3: 6" Well >= 100 Feet (Investigative Methodology -- PURGING IS NOT REQUIRED)	This activity consists of a total dollar per well (\$/well) estimate to complete the following activities: periodic well sampling; necessary sampling equipment; sample storage, preservation and delivery to the laboratory. Assume purging IS NOT required for sampling (i.e. investigative sampling). Assume collection of static water level data is included in the periodic well sampling rate. This item includes all field time, sampling equipment (bailers, rope, bottles, etc.) shipping costs for samples, and decontamination equipment. This item applies to ALL gw monitoring sampling field work conducted at depths greater than or equal to 100 feet. Fluid containment, transportation and disposal is not included.
218	Consultant Cost: Free Product/Fluid Level Monitoring	This activity includes the total personnel, equipment, and material costs (\$/well) for on-site collection of periodic free product and/or groundwater elevation measurements.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
219	Consultant Cost for Drilling and Site Characterization Activities: Make Ready/Preparation Cost	This activity consists of the total personnel, equipment, and material costs (\$/event) necessary for the following activities: preparation and loading of all appropriate equipment, materials and supplies for drilling and site characterization activities. Assume no travel time. Note: This is a one-time charge per event.
220	Consultant Cost for Groundwater Sampling and Remedial Activities: Make Ready/Preparation Cost	This activity consists of the total personnel, equipment, and material costs (\$/event) necessary for the following activities: preparation and loading of all appropriate equipment, materials and supplies for drilling and site characterization activities. Assume no travel time. Note: This is a one-time charge per event.
221	Contractor Cost: Disposal of Contaminated Liquid Produced During Well Development and Purging Events	This activity consists of the total cost per gallon (\$/gallon) to containerize, store, and dispose of investigative-derived waste generated during groundwater well development and compliance sampling. Includes the total personnel, equipment, and material costs and rates.
222	First Periodic Groundwater Monitoring Report Scenario 1: Up Through 5 Wells (Covers first sampling event)	This activity consists of the total personnel, equipment, and material costs (\$/report) necessary to complete the first periodic groundwater monitoring report. The report must include the following: complete description of all work completed; periodic water-level-elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling, influent and effluent sampling for all groundwater treatment systems; amount of free product and groundwater recovered; amount of groundwater treated; site diagrams, and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying or binding.
223	First Periodic Groundwater Monitoring Report Scenario 2: > 5 Wells (Covers first sampling event)	This activity consists of the total personnel, equipment, and material costs (\$/report) necessary to complete the first periodic groundwater monitoring report. The report must include the following: complete description of all work completed; periodic water-level-elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling, influent and effluent sampling for all groundwater treatment systems; amount of free product and groundwater recovered; amount of groundwater treated; site diagrams, and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying or binding.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
224	Subsequent Groundwater Monitoring Report Scenario 1: Up Through 5 Wells (Covers subsequent sampling events)	This activity consists of the total personnel, equipment, and material costs (\$/report) necessary to complete each subsequent groundwater monitoring report. Each report must include the following: complete description of all work completed; subsequent to last periodic report; periodic water-level-elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling, influent and effluent sampling for all groundwater treatment systems; amount of free product and groundwater recovered; amount of groundwater treated; site diagrams, and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying or binding.
225	Subsequent Groundwater Monitoring Report Scenario 2: > 5 Wells (Covers subsequent sampling events)	This activity consists of the total personnel, equipment, and material costs (\$/report) necessary to complete each subsequent groundwater monitoring report. Each report must include the following: complete description of all work completed; subsequent to last periodic report; periodic water-level-elevation data for each groundwater monitor and recovery well; periodic free product thickness data for each well containing free product; analytical results for groundwater sampling, influent and effluent sampling for all groundwater treatment systems; amount of free product and groundwater recovered; amount of groundwater treated; site diagrams, and analysis of data. Activities for the report include the personnel time for preparation, including time for review, clerical support, and all other direct costs such as copying or binding.
226	SAF Application Preparation Cost: Reimbursement Application, Scenario 1: <= 10 Primary (Main Provider) Invoices	This activity consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF Reimbursement Application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying and binding. Costs apply for applications which have no more than 10 Primary (Main Provider) Invoices.
227	SAF Application Preparation Cost: Reimbursement Application, Scenario 2: 10 < Primary (Main Provider) Invoices <= 20	This activity consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF Reimbursement Application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying and binding. Costs apply for applications which have 11 through 20 Primary (Main Provider) Invoices.

**Arizona Department of Environmental Quality  
1998 Cost Ceilings**

1998 Cost Ceiling Item Descriptions

<u>No.</u>	<u>Item</u>	<u>Description</u>
228	SAF Application Preparation Cost: Reimbursement Application, Scenario 3: > 20 Primary (Main Provider) Invoices	This activity consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF Direct Payment Application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying and binding. Costs apply for applications which have greater than 20 Primary (Main Provider) Invoices.
229	SAF Application Preparation Cost: Direct Pay Application	This activity consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF Reimbursement Application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying and binding.
230	SAF Application Preparation Cost: Pre-approval Application	This activity consists of the total personnel, equipment, and material costs (\$/application) required to prepare a SAF Pre-approval Application. Activities include preparation of the application including review, clerical support, and all other direct costs such as copying and binding. Item does not include any work plan preparation, only the application preparation.

L:\ari0076101\99cc\model\exfinal.jal